

**ABSTRACT**

A temperature compensation device for an optical communication device or the like is constructed so that an error value, which is the difference between the current  
5 temperature and a reference temperature, is subjected to digital processing in a temperature comparison unit. A digital error voltage value is calculated and digital PID control is performed instead of analog PID which requires electric components such as a power op-amp, a resistor (R), and a capacitor (C). According to this construction it is possible to reduce the number of electric parts. It is also possible to accept various types of  
10 temperature sensors while using only one PCB regardless of the types of temperature sensors utilized.